

Do Not  
Enter OR

NOV-02-2006 13:27

CLARK & BRODY

2028351755 P.04

10. (currently amended) A nickel alloy including, by mass %, C; 0.01 – 0.04%; Si: 0.05 – 1%; Mn: 0.05 – 1%; P: 0.015% or less; S: 0.015% or less; Cr: ~~[[25]]~~ 28 – 35%; Ni: 40-70%; Al: 0.5% or less; Ti: 0.01 – 0.5%; and the balance Fe and impurities, where the crystal structure has low angle boundary rate of 4% or more as for the grain boundaries and is obtained by applying a heat treatment for precipitation inducing carbides to precipitate at the grain boundaries after a solution treatment at 900 °C or more so as to provide excellent resistance to intergranular stress corrosion cracking.

11. (currently amended) A nickel alloy including, by mass %, C; 0.01 – 0.04%; Si: 0.05 – 1%; Mn: 0.05 – 1%; P: 0.02% or less; S: 0.02% or less; Cr: ~~[[10]]~~ 28 – 35%; Ni: 40-80%; Al: 2% or less; Ti: 0.5% or less; and the balance Fe and impurities, where the crystal structure has low angle boundary rate of 4% or more as for the grain boundaries and is obtained by applying a heat treatment for precipitation inducing carbides to precipitate at the grain boundaries after a solution treatment at 900 °C or more so as to provide excellent resistance to intergranular stress corrosion cracking.

12. (previously presented) The nickel alloy according to claim 11, further including at least one of Co: 2.5% or less; Cu: 1% or less; Nb + Ta: 3.15 – 4.15%; Mo: 8 – 10%; and V: 0.045% or less.